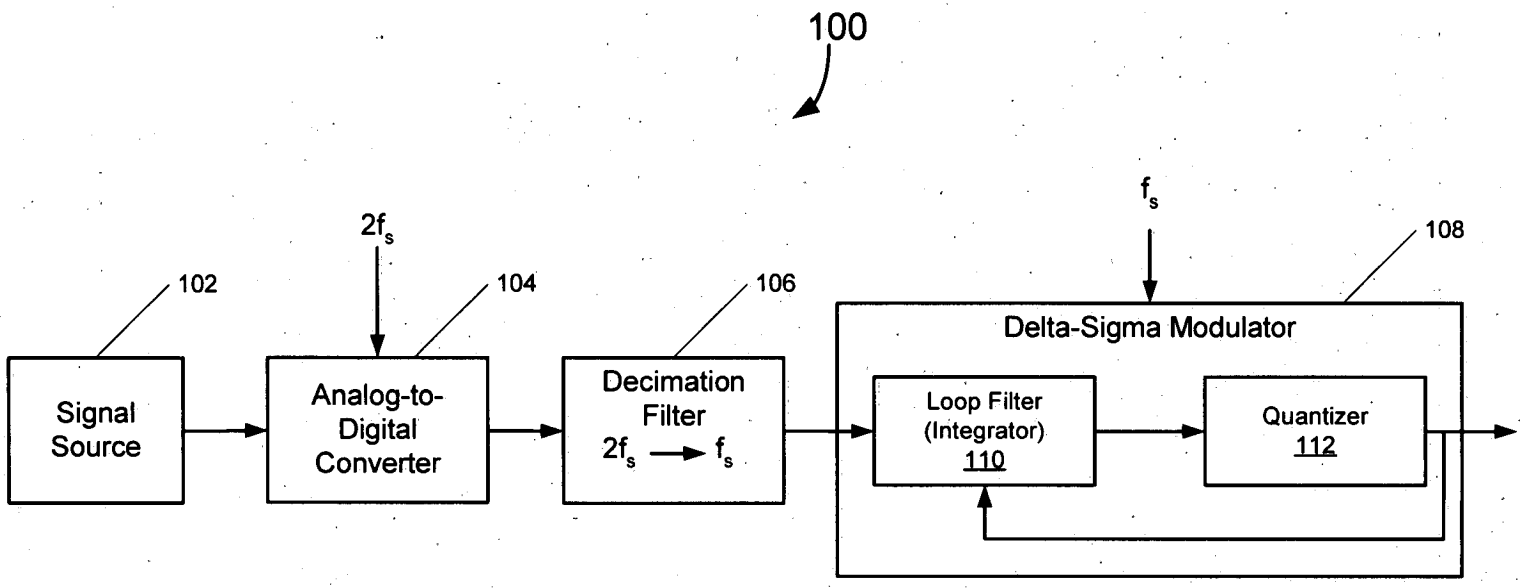


Fig. 1 (Prior Art)

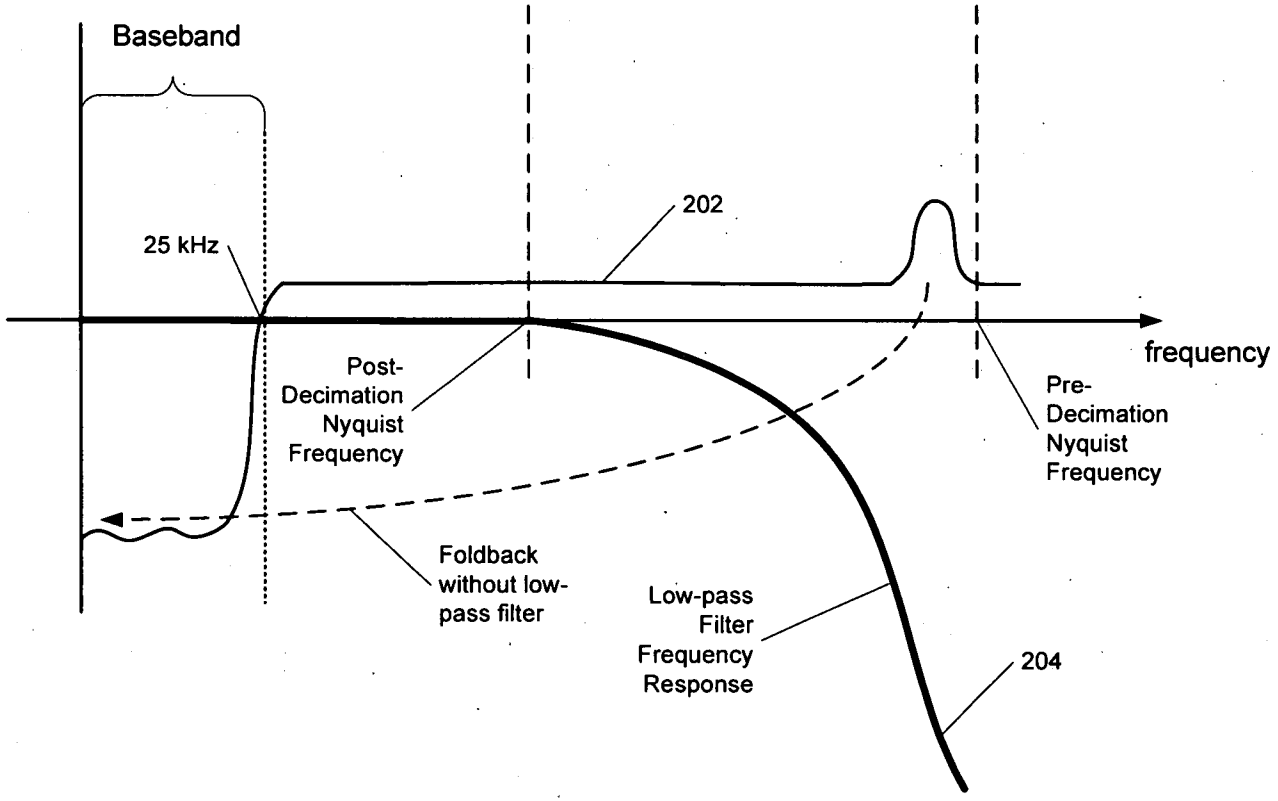

Baseband
25 kHz
202
frequency
Post-
Decimation
Nyquist
Frequency
Pre-
Decimation
Nyquist
Frequency
Foldback
without low-
pass filter
Low-pass
Filter
Frequency
Response
204

Fig. 2

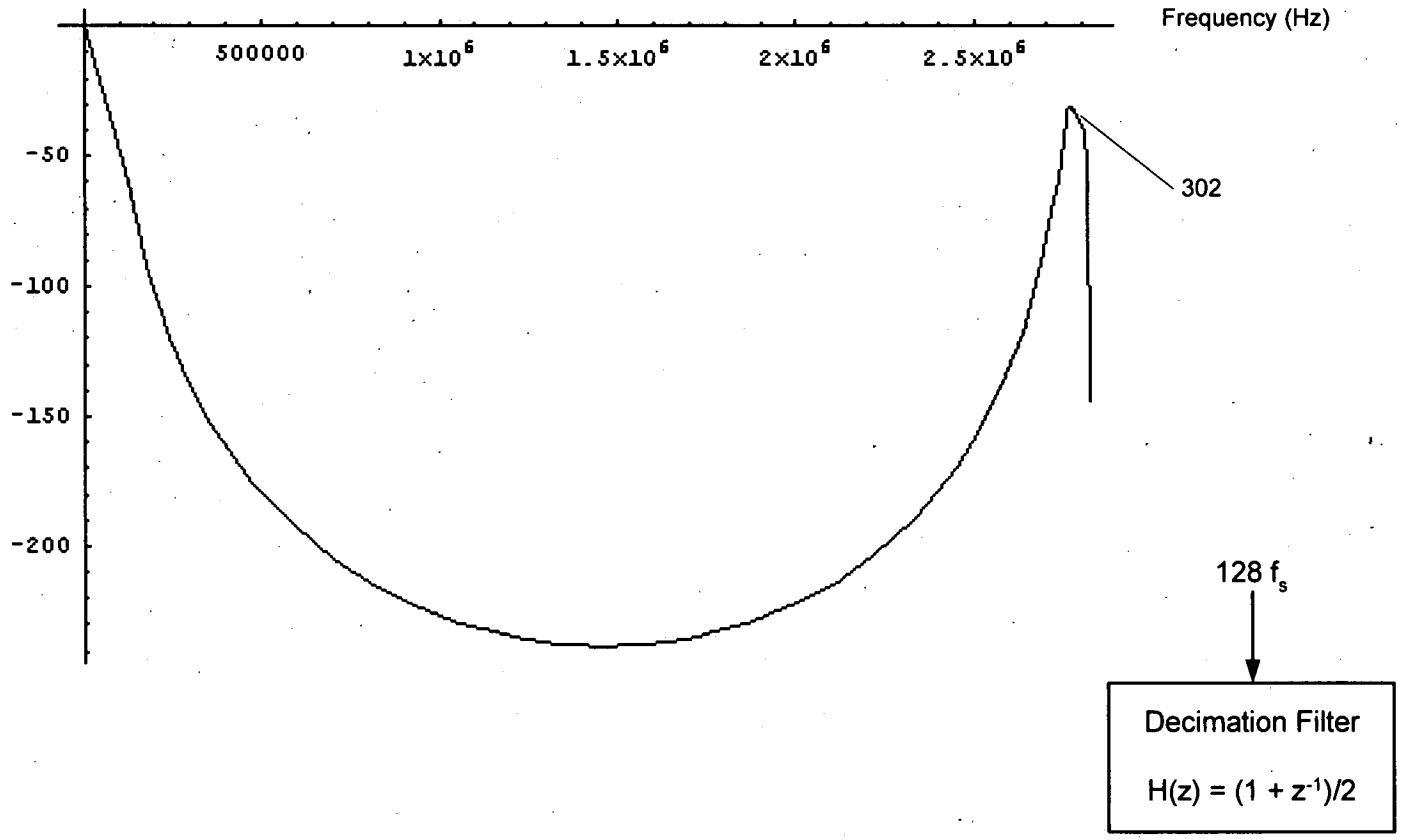


Fig. 3 (Prior Art)

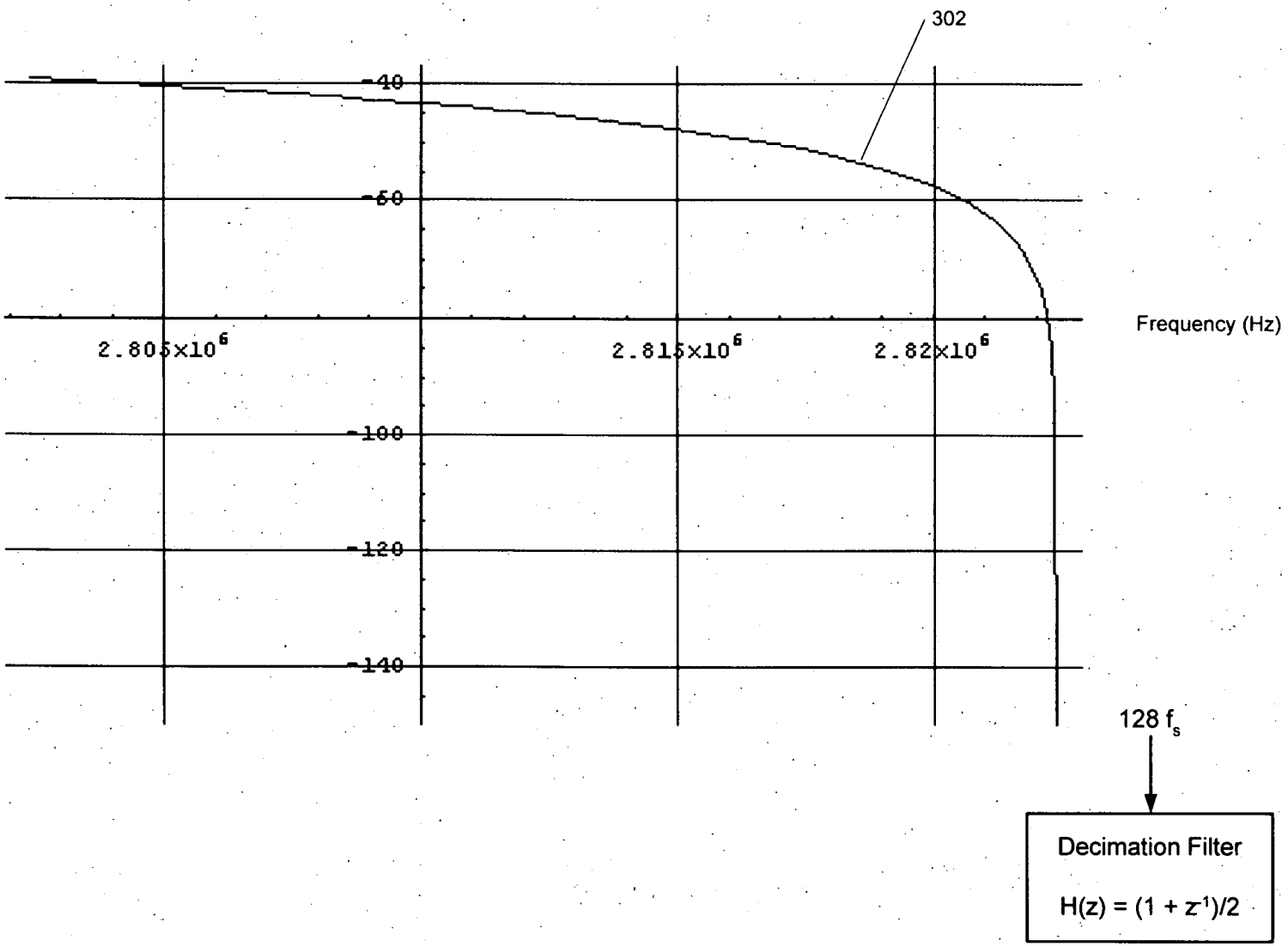


Fig. 4 (Prior Art)

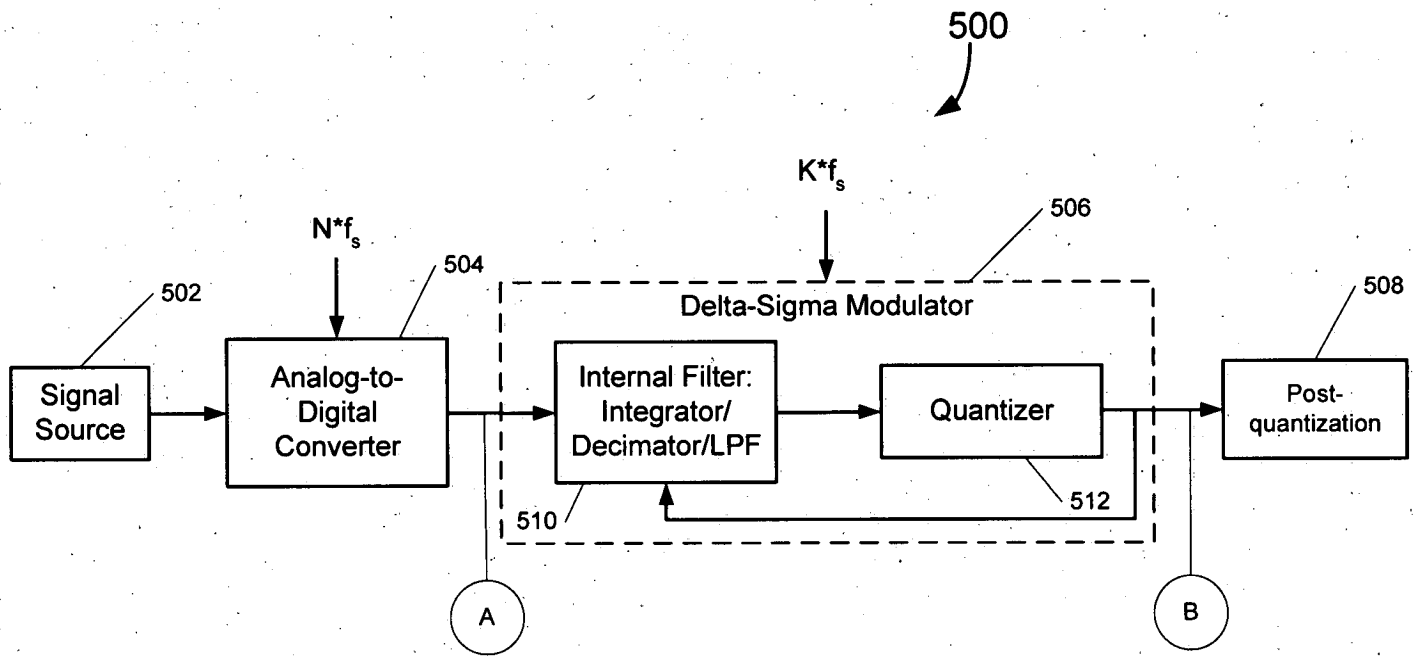

500
K*f_s
506
N*f_s
504
502
Delta-Sigma Modulator
508
Signal Source
Analog-to-Digital Converter
Internal Filter: Integrator/ Decimator/LPF
Quantizer
Post-quantization
512
510
A
B

Fig. 5

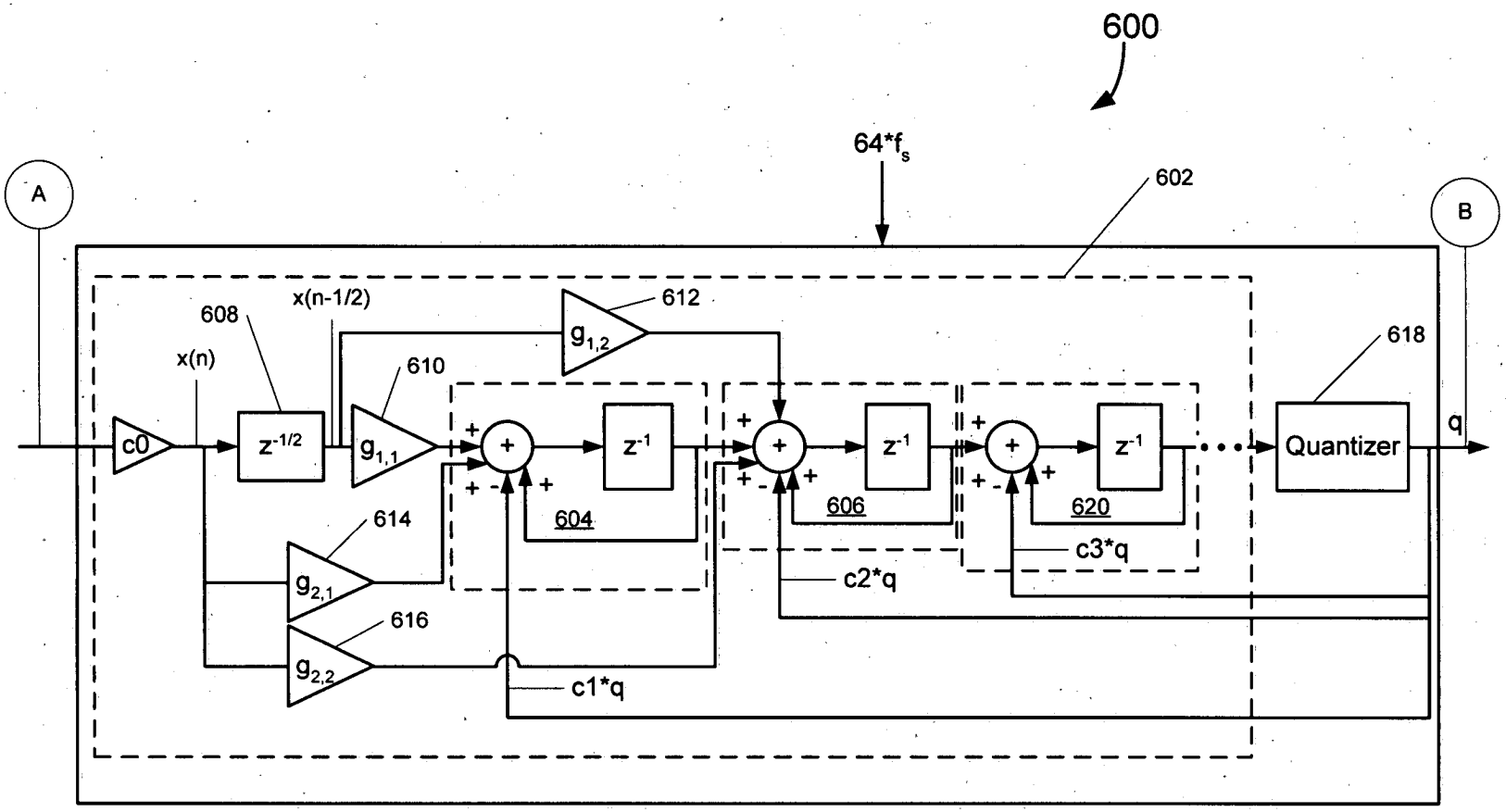
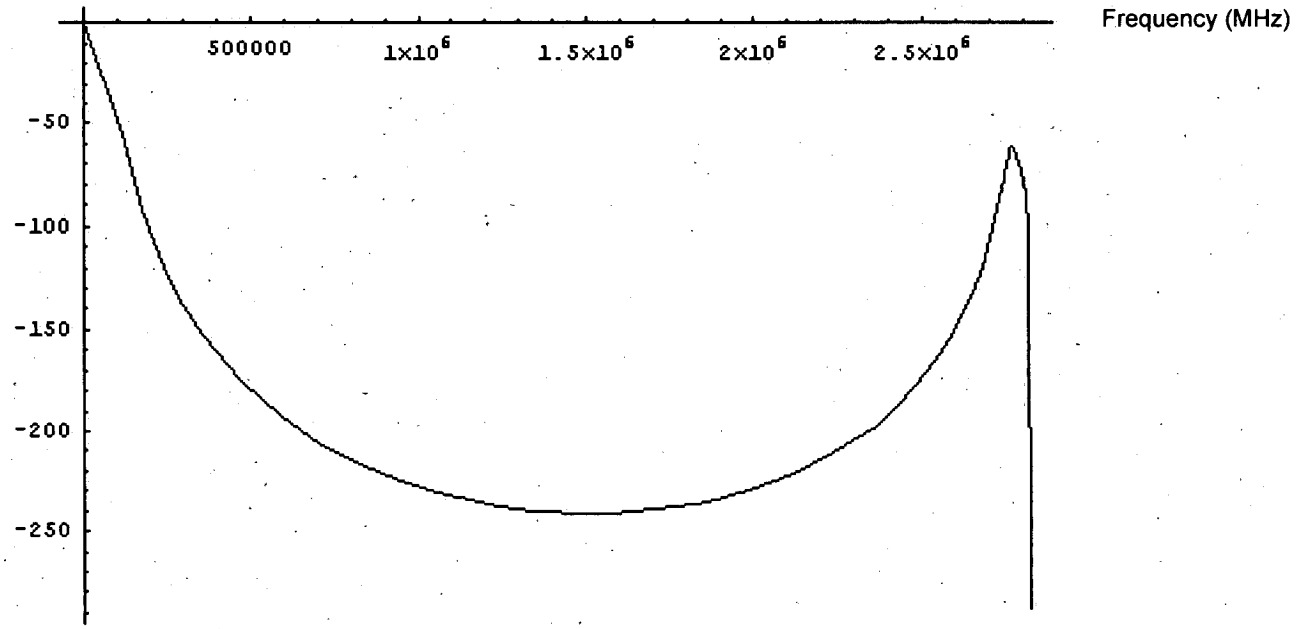
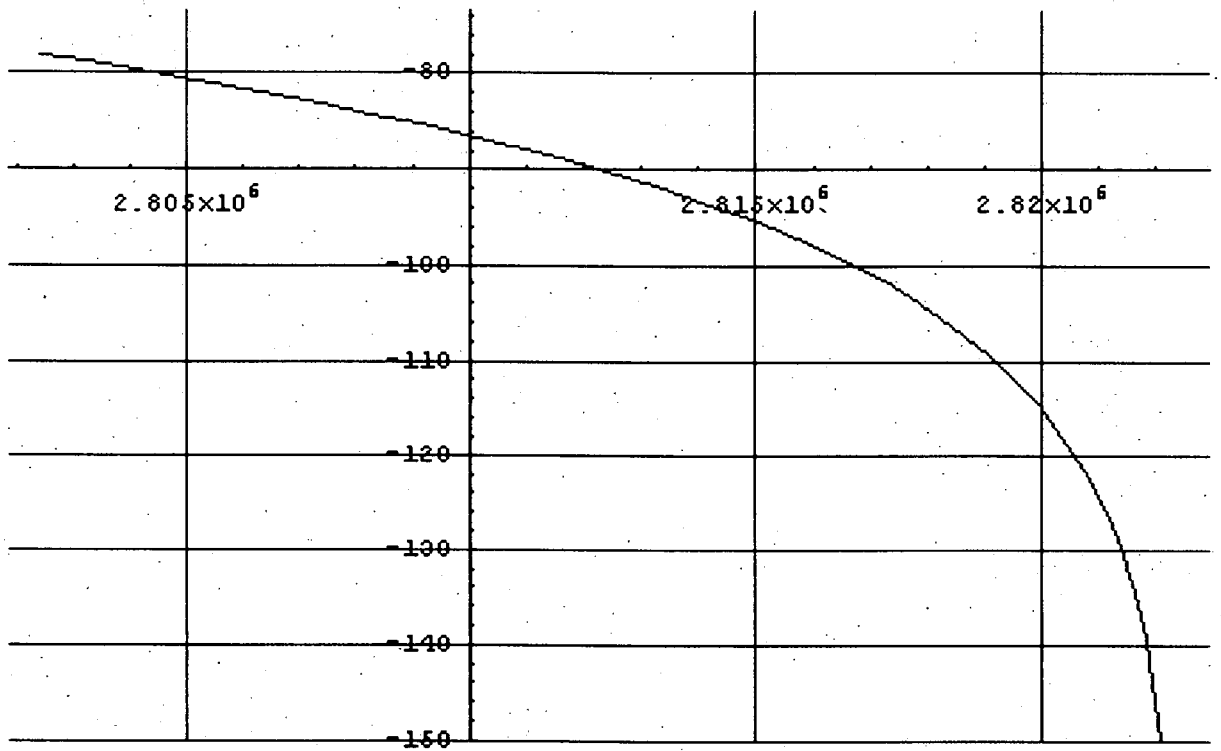

600
64*f_s
602
A
B
608
x(n-1/2)
612
x(n)
610
618
c0
z^-1/2
g_1,1
g_1,2
z^-1
z^-1
z^-1
Quantizer
q
604
606
620
614
c3*q
c2*q
g_2,1
616
g_2,2
c1*q

Fig. 6



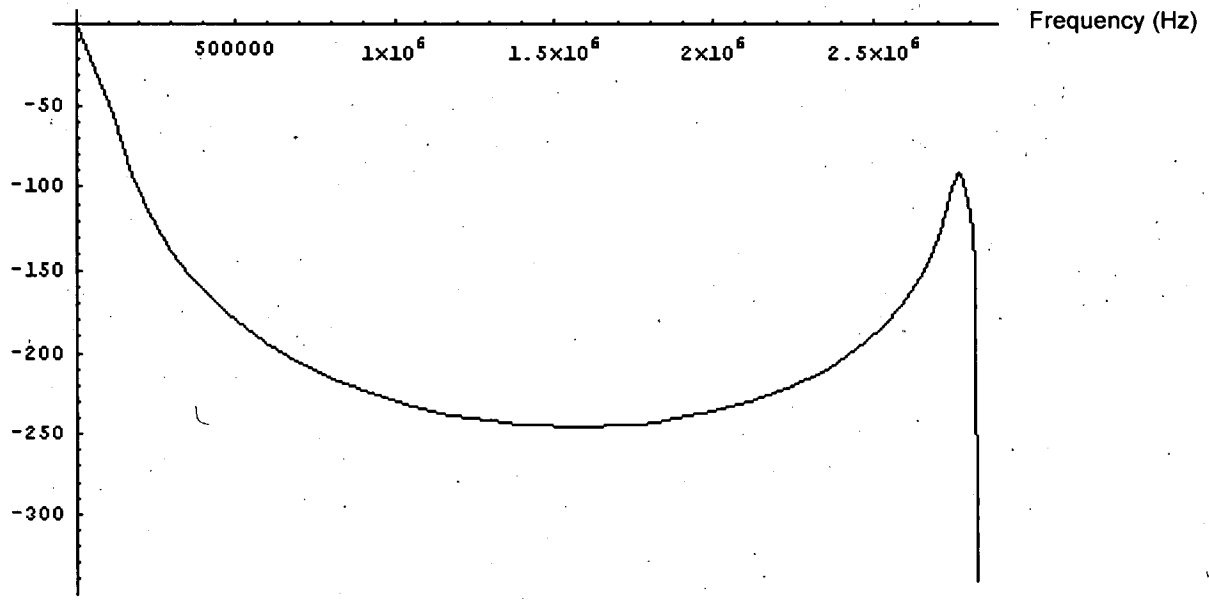
$g_{1,1}$	$g_{2,1}$	$g_{2,2}$	$g_{1,2}$
0.5	0.5	0	0.25

Fig. 7



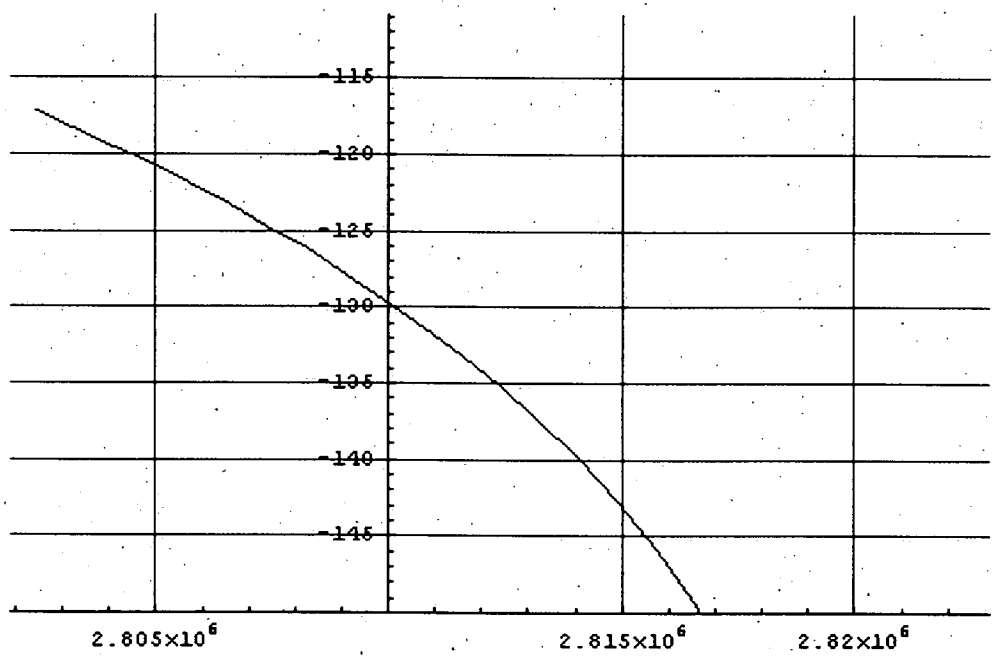
$g_{1,1}$	$g_{2,1}$	$g_{2,2}$	$g_{1,2}$
0.5	0.5	0	0.25

Fig. 8



$g_{1,1}$	$g_{2,1}$	$g_{2,2}$	$g_{1,2}$
0.5	0.5	0.125	0.375

Fig. 9



$g_{1,1}$	$g_{2,1}$	$g_{2,2}$	$g_{1,2}$
0.5	0.5	0.125	0.375

Fig. 10